AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. **(Currently Amended)** An indexing system for generating an index of large volumes of trace data captured from a computer network comprising:

a protocol analyzer operably connected to the computer network and having a trace memory in which trace data from the computer network is selectively stored;

hardware circuitry that selectively identifies locations in the trace memory of desired portions of the trace data, wherein:

the hardware circuitry receives from the processor specified time intervals and the hardware circuitry utilizes the specified time intervals to identify the desired portions of the trace data; and

the hardware circuitry receives a first set of specified time intervals to create a coarse index and a second set of time intervals to create a fine index; and

a processor that utilizes the locations identified by the hardware circuitry to generate an index for the trace data stored in the trace memory.

2. **(Original)** The system of claim 1, wherein the hardware circuitry is a hardware search engine operably connected to the trace memory.

3. **(Original)** The system of claim 1, wherein the protocol analyzer includes the hardware circuitry and the processor as part of the protocol analyzer.

4. **(Original)** The system of claim 1, wherein the computer network is a storage channel network and the trace data comprises frames of packetized data having a header portion and a data portion and the protocol analyzer analyzes the header portion to determine an activity associated with the frame.

5. **(Original)** The system of claim 4, wherein the storage channel network uses a Fibre Channel communication interface protocol.

6. **(Canceled)**

7. **(Canceled)**

8. **(Currently Amended)** The system of claim [[7]]1, wherein the coarse index indexes a first percentage of less than about 5% and the fine index indexes a second percentage of greater than the first percentage and less than or equal to 100%.

9. **(Original)** The system of claim 1, wherein the trace data includes a header portion and a data portion for each record and the hardware circuitry analyzes the header portion of the trace data.

10. **(Original)** The system of claim 1, wherein the processor automatically initiates generation of the index upon completion of a trace.

11. **(Original)** The system of claim 1, wherein the hardware circuitry searches for a first time stamp encountered in each of a series of blocks of trace data in the trace memory and the processor utilizes the first time stamps to build a time index for the series of blocks of trace data.

12. **(Currently Amended)** A method of generating an index of large volumes of trace data captured from a computer network using a protocol analyzer operably connected to the computer network comprising:

using hardware circuitry to selectively identify locations in the trace memory of trace data for desired portions the trace data wherein:

the desired portions are on specified time intervals representing different durations from a given triggering event associated with the trace data stored in the trace memory and the index that is generated is a time index; and

the hardware circuitry is provided with a first set of specified time intervals to create a coarse index and with a second set of time intervals to create a fine index; and

utilizing the locations identified by the hardware circuitry to generate an index for the trace data stored in the trace memory.

13. **(Canceled)**

14. **(Canceled)**

15. **(Original)** The method of claim 12, wherein the generation of the index is automatically initiated upon completion of a trace.

16. **(Original)** The method of claim 12, wherein the hardware circuitry searches for an initial time stamp encountered in each of a series of blocks of trace data in the trace memory and the initial time stamps are utilized to generate a time index for the series of blocks of trace data.

17. **(Currently Amended)** A method of generating a time index of large volumes of trace data comprising:

capturing[[ed]] trace data from a computer network using a protocol analyzer operably connected to the computer network;

selectively storing time stamps with the trace data;

using hardware circuitry to identify locations in the trace memory of trace data associated with selected time stamps data; and

utilizing the locations identified by the hardware circuitry to generate a time index for the trace data stored in the trace memory, wherein the hardware circuitry is provided with a first set of specified time intervals to create a coarse index and with a second set of time intervals to create a fine index.

18. **(Currently Amended)** The method of claim 17 wherein the trace data is stored in the trace memory as a series of blocks of trace data and the hardware circuitry searches for an

initial time stamp encountered in each block of trace data and the initial time stamps are utilized to generate the time index.